TABLE 1 - 9/7/11
ROUND 3 SAMPLE ANALYTICAL REQUIREMENTS SUMMARY
CHESAPEAKE ATGAS 2H SITE
200 LEROY HILL, LEROY TOWNSHIP, BRADFORD COUNTY, PENNSYLVANIA 17724

Parameter/Method	Matrix	Field Samples	Bkgd	QC Sample Summary					Total Field and QA/QC Analyses (not including MS/MSD)
				Dup	Trip[1] Blanks	Rinsate[1,2] Blanks	Field[1] Blanks	MS/MSD	
Alkalinity (SM 2320B)	drinking water	2	0	1	0	0	1	0	4
Conductivity, Specific Conductance (SM 2510B)	drinking water	2	0	1	0	0	1	0	4
Solids, Total Dissolved (TDS) (SM 2540C)	drinking water	2	0	1	0	0	1	0	4
Solids, Total Suspended (TSS) (SM 2540D)	drinking water	2	0	1	0	0	1	0	4
Phosphate, Total (SM 4500 P F)	drinking water	2	0	1	0	0	1	0	4
Turbidity, Nephelometric (180.1)	drinking water	2	0	1	0	0	1	0	4
Oil & Grease (HEM) (1664A)	drinking water	2	0	1	0	0	1	0	4
Arsenic by 6020A	drinking water	1	0	0*	0	0	0	0	1
Metals, Single Analyte (per Metal) (6020A)	drinking water	2	0	1	0	0	1	1	4
Mercury (CVAA) (7470A)	drinking water	2	0	1	0	0	1	1	4
Hardness, Ca & Mg, Al, Fe, K, Na (6010C)	drinking water	2	0	1	0	0	1	0	4
TPH DRO C10-C28 (8015B)	drinking water	2	0	1	0	0	1	0	4
Dissolved Gases, Methane, Ethane, & Ethene (RSK-175)	drinking water	2	0	1	0	0	1	0	4
Anions, Chloride, Bromide, Sulfate (300.0)	drinking water	2	0	1	0	0	1	0	4
Methylene Blue Active Substances (MBAS) (SM 5540C)	drinking water	2	0	1	0	0	1	0	4
Total U, Sr, Li by ICP/MS (6020A)	drinking water	2	0	1	0	0	1	0	4
Gross Alpha/Beta (900.0)	drinking water	3	0	1	0	0	1	0	5
Gamma Spec (K-40, Ra-226, Ra-228, Th-232, Th-234) (901.1)	drinking water	3	0	1	0	0	1	0	5
Ra-226 (903.1)	drinking water	3	0	1	0	0	1	0	5
Ra-228 (Brooks and Blanchard Method)	drinking water	3	0	1	0	0	1	0	5

* Applicable duplicate and MS/MSD included in analysis line for Metals (6020A).

Notes: 1. This QA sample will be an aqueous matrix.
2. Sample to be collected only if non-dedicated sampling equipment is used.

Key:

Bkgd = Background
CRQL = Contract-Required Quantitation limit.
Dup = Duplicate
ECD = Electron capture detector
HRGC = High Resolution Gas Chromatography
MS/MSD = Matrix Spike/Matrix Spike Duplicate
Sr = Strontium

TABLE 2 - 9/7/11
ROUND 3 SAMPLE ANALYTICAL REQUIREMENTS SUMMARY
CHESAPEAKE ATGAS 2H SITE
200 LEROY HILL, LEROY TOWNSHIP, BRADFORD COUNTY, PENNSYLVANIA 17724

Analytical Parameter and Method	Matrix	Sample Preservation	Holding Time	Sample Container(s)
Alkalinity (SM 2320B)	drinking water	Ice, 4°C	14 days	One 250-ml HDPE
Conductivity, Specific Conductance (SM 2510B)	drinking water	Ice, 4°C	28 days	One 250-ml HDPE
Solids, Total Dissolved (TDS) (SM 2540C)	drinking water	Ice, 4°C	7 days	One 250-ml HDPE
Solids, Total Suspended (TSS) (SM 2540D)	drinking water	Ice, 4°C	7 days	One 250-ml HDPE
Phosphate, Total (SM 4500 P F)	drinking water	Ice, 4°C	48 hours	One 250-ml HDPE
Turbidity, Nephelometric (180.1)	drinking water	Ice, 4°C	48 hours	One 250-ml HDPE
Oil & Grease (HEM) (1664A)	drinking water	pH<2, HCL or H2SO4, and cool with ice, 4°C	28 days	One 1-Liter amber glass jars with teflon-lined lids
Metals, Single Analyte (per Metal) (6020A)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE
Mercury (CVAA) (7470A)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	28 days	One 1-Liter HDPE
Hardness, Ca & Mg, Al, Fe, K, Na (6010C)	drinking water	use metals bottle, no extra volume needed	6 months	use metals bottle, no extra volume needed
TPH DRO C10-C28 (8015B)	drinking water	pH<2 with HCl, and cool with ice, 4°C	7-days extract; 40 analyze	One 1-Liter amber glass jars with teflon-lined lids
Dissolved Gases, Methane, Ethane, & Ethene (RSK-175)	drinking water	ph<2 with HCl and cool with ice, 4°C	7 days	One 40-ml glass vial
Anions, Chloride, Bromide, Sulfate (300.0)	drinking water	Ice, 4°C	28 days	One 250-ml HDPE
Methylene Blue Active Substances (MBAS) (SM	drinking water	Ice, 4°C	48 hours	One 500-ml HDPE
Total U, Sr, Li by ICP/MS (6020A)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE
Gross Alpha/Beta (900.0)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE
Gamma Spec (K-40, Ra-226, Ra-228, Th-232, Th-234)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE
Ra-226 (903.1)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE
Ra-228 (Brooks & Blanchard method)	drinking water	ph<2 with HNO3 and cool with ice, 4°C	6 months	One 1-Liter HDPE

Key:

< = less than or equal to

C = Degrees Celsius

CLP = Contract Laboratory Program

CWM = Clear wide mouth

oz = ounce

Note: Analyses may be combined into same bottles as applicable based on lab determination.